



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260 and 261

[EPA-HQ-RCRA-2008-0808; FRL 9658-3]

RIN-2050-AE78

Regulation of Oil-Bearing Hazardous Secondary Materials From the Petroleum Refining Industry Processed in a Gasification System to Produce Synthesis Gas; Final

Determination to Deny Administrative Petition

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; final determination to deny administrative petition.

SUMMARY: EPA is providing notice of a final determination to deny an administrative petition submitted by Earthjustice on behalf of the Sierra Club and the Louisiana Environmental Action Network under the Resource Conservation and Recovery Act. The petition requested EPA to review the final rule, “Regulation of Oil-Bearing Hazardous Secondary Materials From the Petroleum Refining Industry Processed in a Gasification System to Produce Synthesis Gas,” published in the **Federal Register** on January 2, 2008.

FOR FURTHER INFORMATION CONTACT: Alan Carpien, U.S. Environmental Protection Agency, Office of General Counsel, Mail Code 2366A, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone (202) 564-5507; or carpien.alan@epa.gov.

SUPPLEMENTARY INFORMATION

I. General Information

A. How Can I Get Copies Of This Document and Other Related Information?

1. *Docket.* EPA has established a docket for this action under Docket ID No. EPA-HQ-RCRA-2008-0808. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the RCRA Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the RCRA Docket is (202) 566-0270. A reasonable fee may be charged for copying docket materials.

2. *Electronic Access.* You may access this **Federal Register** document electronically through the EPA Internet under the “Federal Register” listings at <http://www.epa.gov/fedrgstr/>.

II. Summary of the Action

EPA is providing notice of a final determination to deny an administrative petition submitted by Earthjustice on behalf of the Sierra Club and the Louisiana Environmental Action Network under the Resource Conservation and Recovery Act. EPA issued an earlier notice tentatively denying this same petition in January 2011 and solicited written comments on this tentative decision (76 FR 5107, Jan. 28, 2011). The petition requested EPA to review the final rule, “Regulation of Oil-Bearing Hazardous Secondary Materials From the Petroleum Refining Industry Processed in a Gasification System to Produce Synthesis Gas,” published in the **Federal Register** on January 2, 2008 (73 FR 57). The EPA has considered the petition, along with information contained in the rulemaking docket, as well as the five public comments received on the tentative denial. After evaluating all of this information, EPA has decided to issue a final determination denying the petition. In a letter from EPA Assistant Administrator Mathy Stanislaus dated April 3, 2012, EPA provided the petitioner with its final decision to deny the

administrative petition. The letter, which is included as an Appendix to this **Federal Register** document explains EPA's reasons for denying the petition, as well as discussing the other comments received on the tentative denial.

Appendix: Letter to Earthjustice Denying Administrative Petition.

Ms. Lisa Gollin Evans
Earthjustice
21 Ocean Avenue
Marblehead, MA 01945

Dear Ms. Evans:

This letter is written to inform you of our final determination to deny the April 1, 2008 administrative petition you submitted to the U.S. Environmental Protection Agency (EPA or the agency) under the Resource Conservation and Recovery Act (RCRA) § 7004(a), 42 U.S.C. § 6974(a) on behalf of the Sierra Club and the Louisiana Environmental Action Network (LEAN) (hereafter referred to as "Sierra Club"). Sierra Club requested that EPA review the final rule, "Regulation of Oil-Bearing Hazardous Secondary Materials from the Petroleum Refining Industry Processed in a Gasification System to Produce Synthesis Gas" (Gasification Rule). This final rule was published in the **Federal Register** on January 2, 2008 (73 FR 57, et seq.). The petition raised both procedural (notice and comment) and substantive grounds for seeking the agency's review of the Gasification Rule. EPA has made a final determination to deny the petition and in accordance with the regulatory requirements of 40 CFR 260.20, EPA is providing notice of this determination to deny the petition in the **Federal Register**.

A tentative denial was issued on January 19, 2011, and published in the **Federal Register** on January 28, 2011 (76 FR 5107). Sierra Club filed comments on this tentative denial (hereafter referred to as "SC Comments").¹ This final denial responds to the additional points raised in the SC Comments that were not raised in previous submittals and incorporates all previous agency responses to your original petition.²

¹ See docket item EPA-HQ-RCRA-2008-0808-0017.

² We note that § 7004(a) of RCRA, 42 U.S.C. § 6974, provides that any person may petition the Administrator for the promulgation, amendment or repeal of any regulation under the Act. While your original petition failed to state whether you were requesting that EPA amend or repeal the Gasification Rule, the SC Comments request the agency "revoke the Rule in its entirety." SC Comments at p. 2. EPA also received another comment from a number of environmental organizations and persons (EPA-HQ-RCRA-2008-0808-0018) requesting that the agency revoke the rule. This comment is regarded by the agency as general support for the SC comments, in that it mirrored the concerns raised in the comments submitted by Earthjustice. (See comment EPA-HQ-RCRA-2008-0808-0018 for a complete list of the environmental organizations and persons that submitted this comment.)

This final denial to your petition adopts all of the reasoning stated in our letter of November 2008³ and the January 2011 tentative denial, both of which are incorporated into this reply. We find no new substantive arguments in your comments that would cause the agency to grant your administrative petition.

In general, you argue that EPA has improperly and arbitrarily removed hazardous wastes from RCRA's comprehensive cradle-to-grave regulatory system and that EPA's Gasification Rule is directly contrary to what you describe as RCRA's statutory mandate to regulate the treatment, storage, and disposal of hazardous waste derived fuels and the burning of hazardous wastes. For the first time, in the proceeding on this rule, you also claim that it frustrates the Clean Air Act. You argue, furthermore, that EPA's "finding" that this rule will not jeopardize human health and the environment is unsupported by the administrative record for this rulemaking. Finally, you argue that the Gasification Rule was promulgated in violation of the Administrative Procedure Act (APA).

EPA disagrees with your comments. The agency has properly excluded the materials in question from RCRA Subtitle C regulation and does not expect adverse effects on human health or the environment from this regulation. EPA finds that you have not presented any new information that would suggest or otherwise require that we review the Gasification Rule, nor have you raised any issues that have not already been raised by the comments in the rulemaking process. EPA also finds that the Gasification Rule meets the notice and comment requirements of the APA and, therefore, disagrees with your view that the agency did not provide adequate notice to the public and an opportunity to comment on the provisions of the final rule.⁴

Legal Arguments

EPA has discussed in earlier responses that it disagrees with Sierra Club's legal argument that the final rule does not comport with RCRA § 3004(q), 42 U.S.C. § 6924(q). Because EPA is providing an exclusion from the definition of solid waste for oil-bearing hazardous secondary materials fed to gasifiers subject to this rule, EPA does not implicate the provisions of section 3004(q), which requires that the hazardous secondary material first be a solid waste. Nothing cited in your legal argument refutes this point. Discussion in SC Comments at pp. 6-7 merely provides a cumulative argument that burning of hazardous wastes must be regulated. Since the

³ Letters to Lisa Gollin Evans and James S. Pew, Earthjustice, from Susan Parker Bodine, EPA Assistant Administrator, dated November 14, 2008. This letter is available in the docket (docket item EPA-HQ-RCRA-2008-0808-0004 and EPA-HQ-RCRA-2008-0808-0006).

⁴ The American Petroleum Institute (API) (docket item EPA-HQ-RCRA-2008-0808-0010) and the Metals Industries Recycling Coalition (MIRC) (docket item EPA-HQ-RCRA-2008-0808-0013) also filed comments supporting the Gasification Rule. EPA accepts the reasoning in the comments in support of the decision with the exception that the agency does not agree that the residuals inserted into the gasification process "may not be considered solid or hazardous wastes under controlling case law." API comments at p. 9. Rather, EPA has determined that it has the discretion to exclude the residuals from the definition of solid waste. A comment submitted by Industry Professionals for Clean Air and Air Alliance Houston (docket item EPA-HQ-RCRA-2008-0808-0012) expresses concern regarding monitoring and regulation of gasification processes. This is simply a general comment that EPA acknowledges regarding the appropriate monitoring and regulation under both RCRA and the Clean Air Act for these facilities.

oil-bearing hazardous secondary materials are not considered solid wastes, they cannot be hazardous wastes.

Further, Sierra Club raises a legal argument that has already been considered and rejected by the D.C. Circuit. In *American Mining Congress (AMC) v. EPA*, 824 F.2d. 1177, 1187-89, the agency relied upon section 3004(q) to defend a broad definition of solid waste. The court specifically considered whether the exemption in section 3004(q)(2)(A) for “petroleum refinery wastes containing oil which are converted into petroleum coke at the same facility at which such wastes were generated” implies that the term “solid waste” may include materials that have not been disposed of, but that are destined for reuse in another process. The court concluded that the exemption does not carry that implication, and section 3004(q) only applies to materials that have already become hazardous. See AMC at 1188 &n.16.

Plainly, section 3004(q) directs EPA to regulate all facilities that “produce a fuel from hazardous wastes” or “burn, for purposes of energy recovery” any such fuel. 42 U.S.C. § 3004. Moreover, EPA agrees with the thrust of your comment that a recycled material does not become a non-waste simply because it is burned or processed to produce a fuel. Rather, the issue is whether the recycled material is discarded.

The SC Comments (pp. 8-10) seem to imply that case law says that burning of recycled secondary materials is a waste activity, regardless. However, none of the cases cited deal with burning of material. In fact, the only case in the United States Court of Appeals that deals with whether certain burning of material is a waste found that the burning was not a waste activity. See *Safe Air For Everyone v. Waynemeyer* (“Safe Air”), 373 F.3d 1035 (9th Cir. 2004) (Kentucky bluegrass stubble burned to return nutrients to the soil is not a solid waste).

Your argument, including your discussions of the Clean Air Act, is ultimately based on your “assertion” that, in turn, EPA believes material inserted into a gasifier is not discarded. EPA disagrees. The agency, however, stands on the record developed in the rule for its determination that the recycled oil-bearing hazardous secondary material excluded from the definition of solid waste in this rule is not discarded.

For the first time in the SC Comments, you claim that the gasification rule is “contrary to and frustrates the purposes” of the Clean Air Act. EPA does not understand the relevance of the Clean Air Act to this proceeding, although coverage under the Clean Air Act may be an issue in other proceedings. As noted above, the issue in this case is simply whether the recycled oil-bearing hazardous secondary material inserted into the gasifier is discarded. As a result of the Gasification Rule, the gasifiers would be subject to Clean Air Act § 112 (42 U.S.C. § 7412) because EPA has determined that the material has not been discarded.

At least one of the arguments on the Clean Air Act is taken out of context. See SC Comments at pp. 10-12. As one aspect of its determination that gasification is not discard, EPA responded to public comments, which argued that “gasification . . . is more a waste management process involving incineration than a petroleum refining process” by comparing gasification to true waste management incineration. See 73 FR at 61. The SC Comments, however, discuss whether gasification involves combustion – a matter not relevant to the Gasification Rule. See SC Comments at pp. 11-12. Even if combustion occurs, the issue is whether this is a waste management activity or, as EPA found, a “component of fuel manufacturing operations at a petroleum refinery.” *Id.* The occurrence of combustion, by itself, does not render material a solid

waste, if the Agency determines that this aspect is part of the manufacturing process and does not involve discard of the material.

Notice and Comment Issues

Your petition states that the rule violates the notice and comment requirements of the APA. Your basis for this assertion is that EPA "relied on" a proposal suggested in a 1998 **Federal Register** notice⁵ and "not on the 2002 proposed rule"⁶ to formulate the Gasification Rule. You suggest that, as a result, the final rule "is not a "logical outgrowth" of the agency's proposed rule" (Petition at p. 7) and, therefore, "the public was denied the opportunity for notice and comment in several critical areas." (Petition at p. 8)

The "critical areas" to which you refer in the petition are noted below.

(1) You assert that the Gasification Rule does not contain "chemical and physical specifications of the synthesis gas fuel product that is produced by gasifying the oil-bearing hazardous secondary materials" (Petition at pp. 8-10). In support of this assertion, you refer to statements in the preamble to the March 2002 proposal for the Gasification Rule (67 FR 13684, *et seq.*) and one statement in the January 2, 2008, final rule. The statements in the March 2002 proposal discuss various reasons why EPA thought, at the time, there should be chemical and physical specifications for synthesis gas produced and also express concerns as to what concentrations of metals actually exist in synthesis gas. The SC Comments reiterate this issue at pp. 14-15.

(2) You assert that the Gasification Rule "fundamentally alters the definition of gasification and entirely removes proposed conditions pertaining to operation of the gasifier," particularly requirements for slagging inorganic feed at temperatures above 2,000 degrees C. (Petition at p. 10). These comments were reiterated in the SC Comments at pp. 15-17.

(3) You assert that the Gasification Rule is insufficiently protective of human health and the environment because it did not "require that co-products and residues generated by the gasification system meet the Universal Treatment Standards if these materials are applied to the land," even though the agency had proposed such conditions in March 2002. (Petition at pp. 10-12). The SC Comments discuss these issues at pp. 17-18.

The SC Comments (at p. 18) acknowledge that the original petition "enumerated" these APA violations. EPA responded to these arguments in both the November 2008 letter and the January 2011 tentative denial, and believes it is not necessary to repeat those responses in this final denial, and simply incorporates by reference those responses in this denial. In summary, in the Gasification Rule, EPA scaled back on its plans for a more "ambitious" exclusion than proposed in March 2002 and returned largely to its original views regarding an exclusion for oil-bearing hazardous secondary materials returned to the petroleum refining system. See 73 FR 58-59. The final Gasification Rule retained some conditions and removed others as a result of the agency's

⁵ Notice of Data Availability (NODA), 63 FR 38139 (July 15, 1998).

⁶ "Regulation of Hazardous Oil-Bearing Secondary Materials From the Petroleum Refining Industry and Other Hazardous Secondary Materials Processed in a Gasification System To Produce Synthesis Gas; Proposed Rule," 67 FR 13684 (March 25, 2002).

deliberations on each condition that took into account all of the comments received. EPA had received comments ranging from demands for full hazardous waste regulation to those arguing that the agency should not be regulating gasification at all since it was an integral part of the petroleum refining process and did not constitute waste management. See 73 FR at 59. The variety and nature of comments submitted demonstrates that EPA had a record upon which to make a decision that was based on a wide range of opinions and information.

EPA's November 2008 and January 2011 documents, stated that the March 2002 Gasification Proposal specifically provided notice that the provisions of the 1998 NODA were still being considered and noted that it is significant that your original administrative petition ignores this discussion in the March 2002 proposal. The SC Comments (at p.18), for the first time, respond to this notice argument. EPA continues to defend its position that this discussion in the March 2002 Gasification Proposal is supportive of the agency's position that adequate notice and comment was provided.⁷

Arbitrary and Capricious Issues

The SC Comments (at pp.19-28) provide a longer discussion than the original petition on your argument that the Gasification Rule is arbitrary and capricious. However, the arguments for the most part are simply those reiterated in comments on the rule and fail to cite information not provided in the rulemaking record which EPA has already considered. EPA understands that you may disagree with the agency's conclusions, but we believe that the regulatory choices made by the agency are reasonable based on the rulemaking record.

In the absence of any new relevant information, it would not be useful for the agency to revisit evidence and arguments it has already carefully considered. Moreover, in our view, the notice and comment issues you have raised are actually discussions of the merits of the agency's decision with which you disagree. See 73 FR 61-67. In fact, the SC Comments do not point to any information which EPA lacks to make its decision.

Additional Issues

The SC Comments do cite two reports issued after the Gasification Rule was published.⁸ However, the information in these studies are cumulative at best and deal with the management of municipal solid waste and the role that incinerators, gasification and pyrolytic processes have on potentially affecting the use of waste reduction and recycling activities. Neither report specifically explores the subject of recycling of oil-bearing hazardous secondary materials at a petroleum refinery through gasification. Furthermore, the Gasification Rule applies only to gasification operations occurring at petroleum refineries for the recycling of oil-bearing hazardous materials and does not apply to other secondary materials, including municipal solid waste.

⁷ For example, see footnote 2 of the preamble found at 67 FR 13685, footnote 9 of the preamble found at 67 FR 13688, and the discussion in Section VI of the preamble found at 67 FR 13689.

⁸ *Waste Gasification – Impact on the Environment and Public Health*. The Blue Ridge Environmental Defense League. February 2009. *An Industry Blowing Smoke. 10 Reasons Why Gasification, Pyrolysis and Plasma Incineration are Not Green Solutions*. Global Alliance for Incinerator Alternatives Global Anti-Incinerator Alliance. June 2009.

In addition, Sierra Club alleges that EPA predicted that “over 150 refineries . . . could potentially exploit” the Gasification Rule and thereby burn over 320,000 tons of hazardous waste without adequate protections. As discussed in the final rule, the agency’s cost-benefits analysis was based on two scenarios drawn from U. S. Department of Energy projections on the future of gasification operations at petroleum refineries: a low capacity analysis (three gasifiers employed at three different refineries) and a high capacity analysis (five gasifiers at five refineries). This is far different than the 150 refineries Sierra Club argues would “exploit” the exclusion.⁹ As for the 320,000 tons of hazardous waste being burned, this number represents the total amount of hazardous waste generated by petroleum refineries in 2003 as reported to the RCRA Biennial Reporting System (BRS) and in no way represents the amount of oil-bearing hazardous secondary material which would be fed into a gasifier at a petroleum refinery.¹⁰

Finally, Sierra Club introduces yet another new issue, not raised in the original administrative petition, regarding EPA’s failure to adequately assess environmental justice as part of its cost assessment and the agency’s lack of effort to ascertain the full range of threats the Gasification Rule would present to disadvantaged, low-income and minority communities living nearby the exempted refineries. The agency concluded, based on its technical analysis supporting the rule,

⁹ This number is based on data from the 2003 RCRA Biennial Reporting System (BRS) using the following waste codes K048-K052, K169-K172, F037 and F038. This is hazardous waste that was reported to EPA that was generated and managed in 2003. The BRS reported 324,371 tons of hazardous waste generated by 153 sites (Standard Industrial Classification 2911). The average generation rate was calculated at 2,314 tons per year, with a maximum generation rate of 76,582 tons per year and a minimum of less than 1 ton per year. Information from the report, *Refinery Technology Profiles: Gasification and Supporting Technologies*. U.S. Department of Energy, National Energy Technology Laboratory, June 2003, suggests that growth in petroleum refinery gasification will most likely be driven by future supply and demand of petroleum coke with approximately 40 refineries within the U.S. producing sufficient quantities of petroleum coke to be considered candidates for the addition of gasification to their production process. The report suggests a market penetration rate of one plant every two years. EPA’s analysis shows that both waste characterization data and waste generation rates indicate that industry would probably not build a gasification unit dedicated to gasifying oil-bearing hazardous secondary materials and the most probable gasification scenario would be a petroleum refinery building a gasification unit for petroleum coke gasification with oil-bearing hazardous secondary materials possibly used as a supplemental feed (accounting for between 0.1 and 10 percent of the total feed rate) (docket item EPA-HQ-RCRA-2002-0002-0110). Given these assumptions, EPA would estimate that with an average generation rate of 10,000 tons per year of oil-bearing hazardous secondary material, a total of no more than 50,000 tons per year of oil-bearing hazardous secondary material would be placed into a gasification unit as part of the petroleum refining process.

¹⁰ See: *Assessment of the Potential Costs, Benefits, and Other Impacts of the Exclusion for Gasification of Petroleum Oil-bearing Secondary Materials – Final Rule* (docket item EPA-HQ-RCRA-2002-0002-0089).

that the gasification of hazardous secondary materials at petroleum refineries does not represent a greater risk to the public than the baseline used to develop the analysis.¹¹

As previously stated, a document will be published in the **Federal Register** announcing the agency's final decision to deny your administrative petition. If you should have any questions, please contact Alan Carpien, EPA's Office of General Counsel at (202) 564-5507.

Sincerely,

Mathy Stanislaus
Assistant Administrator,
Office of Solid Waste and Emergency Response

Dated: April 3, 2012

Mathy Stanislaus,

Assistant Administrator,

Office of Solid Waste and Emergency Response.

¹¹ The rule is projected to result in benefit-cost savings for petroleum refineries using the exclusion. Petroleum refineries choosing not to take advantage of the exclusion would experience no direct impact from the rule. The benefit-cost analysis showed between \$5.2 million and \$48.7 million in net social benefits per year with avoided waste management costs constituting the most significant share of the benefits, followed by the energy savings from increased fuel production. The analysis further showed that the areas potentially affected by the rule showed disproportionately high minority/low income populations, but that gasification of oil-bearing hazardous secondary materials does not represent a greater risk to the public than baseline management, and that as less material is received by hazardous waste management facilities, low income and minority populations would likely experience a potential reduction in risk under the rule.

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